

DOCUMENT RESUME

ED 477 757

IR 022 053

AUTHOR Tandon, Piyusha; Gilman, David A.  
TITLE The Role of Delivery Medium in Distance Education.  
PUB DATE 2003-04-14  
NOTE 13p.  
PUB TYPE Reports - Research (143)  
EDRS PRICE EDRS Price MF01/PC01 Plus Postage.  
DESCRIPTORS \*Computer Assisted Instruction; Data Collection; \*Distance Education; Higher Education; Internet; Lifelong Learning; Participant Satisfaction; Student Attitudes; Student Reaction; Student Surveys  
IDENTIFIERS Indiana State University; \*Student Satisfaction

ABSTRACT

This study is based on data collected by the Division of Lifelong Learning at Indiana State University, in fall 2002. The data collected was in the form of a survey questionnaire, mailed to students taking distance courses. The main objective of the study was to analyze student preference for the four types of modalities, designed for the delivery of the distance courses at Indiana State University. It was also aimed at looking at the student satisfaction for the various services provided by Lifelong Learning. The study concluded that significantly more students preferred taking courses via the Internet than via television, videotape, or correspondence. (Contains 10 references and 9 figures.)  
(Author)

# **The Role of Delivery Medium in Distance Education**

**Piyusha Tandon and David A. Gilman**

**April 2003**

PERMISSION TO REPRODUCE AND  
DISSEMINATE THIS MATERIAL HAS  
BEEN GRANTED BY

**D.A. Gilman**

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)

1

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

This document has been reproduced as  
received from the person or organization  
originating it.

Minor changes have been made to  
improve reproduction quality.

Points of view or opinions stated in this  
document do not necessarily represent  
official OERI position or policy.

### Abstract

The present study is based on the data collected by the Division of Lifelong Learning, at Indiana State University, in Fall 2002. The data collected was in the form of a survey questionnaire, mailed to students taking distance courses. The main objective of the study was to analyze the student preference for the four types of modalities, designed for the delivery of the distance courses, at Indiana State University. It was also aimed at looking at the student satisfaction for the various services provided by Lifelong Learning. The study concluded that significantly more students preferred taking courses via the Internet than via television, videotape or correspondence.

### Background of the Problem

Keeping pace with technological advancements is currently regarded as one of the most challenging tasks for educators. This is especially true, given that the transition involves heavy costs, faculty training and student acceptance, for the change. In keeping with the new-age technology, Indiana State University recently updated its course offerings, by adopting WebCT, a courseware development tool, for creating online courses. However, both educators and administrators were keen to determine whether students preferred one medium of delivery for distance courses, to the others.

According to Eastmond (2000), distance education can be defined as a bridge between the learner and the instructor, who are separated by distance and time. However, in today's changing scenario, distance education is no longer the forte of the off-campus student. Many traditional students are signing up for distance education classes, often because of a preference for the particular mode of delivery of the course. This, according to Kearsley (1998), has helped change the image of distance education, from "an alternate form" of education, to mainstream teaching.

Among the different options available for delivery of courses, the Internet is rapidly becoming a favorite. According to Barker (2000), this is especially true of technologically advanced countries like the United States. One of the biggest advantages of online courses, as pointed out by Armstrong, Gessner & Cooper (2000), is the easy accessibility to computers, whether at

home, in school or at work. Moreover, it allows for security and privacy, as noted by Swanson (2001), based on her experience with web-based courses.

However, research indicates that online courses are not the most popular, in some of the developing countries (Eastmond, 2000). Many academic institutions across the world continue to promote the use of radio, television and videoconferencing (Motamed, 2001). This is particularly noteworthy, given the fact that infrastructure and resources are often insufficient, if not completely absent.

The latest trends in education suggest the combination of two or more media. For instance, Mortensen (2000) promotes synchronous learning by suggesting the use of "streaming media" as the delivery medium. This would imply the use of Internet and live video captures for instruction. Thus, it would allow for face-to-face interaction, without traversing huge distances.

This changing face of technology, and consequently distance education, also, raises several issues. A key concern, which has often been voiced by administrators and educators alike, is whether students are ready for the transition and are the ones benefiting from it. Criticism against the use of the Internet for course delivery includes the argument that some institutions have blindly adopted Internet courses, for the sake of enhancing their image (Dwyer, 2000), without conducting any needs assessment analysis.

### Statement of the Problem

The maturation of distance education, as mainstream instruction, has largely been attributed to the popularity of the World Wide Web. However, the important question to ask is whether students are satisfied with the switch, from traditional distance education, to the current use of technology. This question was especially pertinent to the Division of Lifelong Learning, at Indiana State University, since the demographics of a majority of its students corresponded to first-generation students, from outback regions of the state.

For the purpose of the current study, the following directional hypothesis was tested:

1. Students in distance education, at Indiana State University, will indicate a greater preference for online course delivery than for courses delivered via IHETS, videotape or correspondence.
2. In addition, a general aim of the study was to look at the student satisfaction for the various services offered by the Division of Lifelong Learning.

### Methodology

The sample for this study consisted of students taking distance education courses at Indiana State University, in the fall of 2001. Though, the survey questionnaire was sent to all students taking distance education courses, the sample only comprised of those students who returned the completed survey form. Data thus collected, was further analyzed. Therefore, though the questionnaire was sent out to roughly about four hundred students, there were only a hundred and sixty-three completed entries, available for analysis. There were no comparison groups in the current study, since the sample collected was of one group, over a single semester.

The demographics of the group were varied. Students belonged to off-campus remote sites, as well as on-campus locations. Students were also representative of different academic backgrounds, ranging from a high school diploma to a graduate degree. Similarly, there were vast differences in the levels of employment, purpose for taking the course, experiences with distance courses and the modality of the distance courses currently taking.

The data was first depicted in the form of a spreadsheet. Each student data, for every item was computed, as a percentage. Hence, the next step of the statistical computation, involved graphically illustrating the data in the form of pie charts; one for each item.

## Results

Fig.-I consists of the students percentages for the medium of delivery, of the distance course that they took in fall 2001. As seen, the maximum courses taken were Internet courses, with correspondence and television following next.

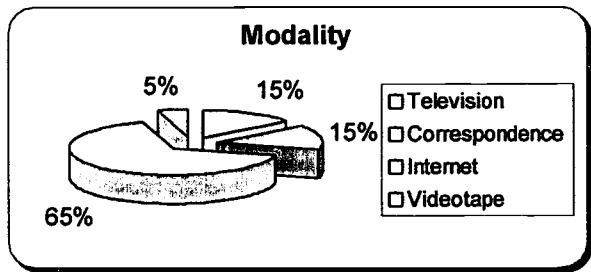


Fig.-I

Fig.-II illustrates, the preferred mode of course delivery as listed out in the student sample. As seen, the Internet is the most preferred, with 77% of the total student sample, in favor of online courses.

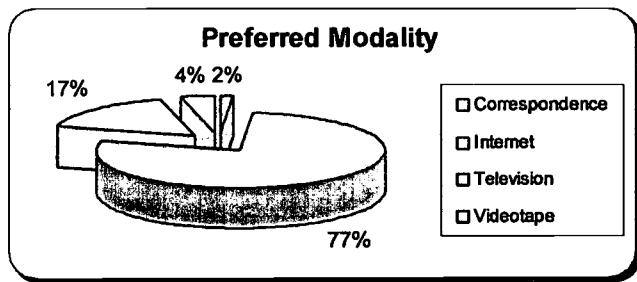


Fig-II

Fig.-III is representative of the various reasons for taking distance education courses. The most pertinent reason is the inability to take classes on-campus. A second reason for taking a distance education course, listed out by 19% of the sample, is a preference for that medium of delivery of the course, to on-campus, traditional courses.

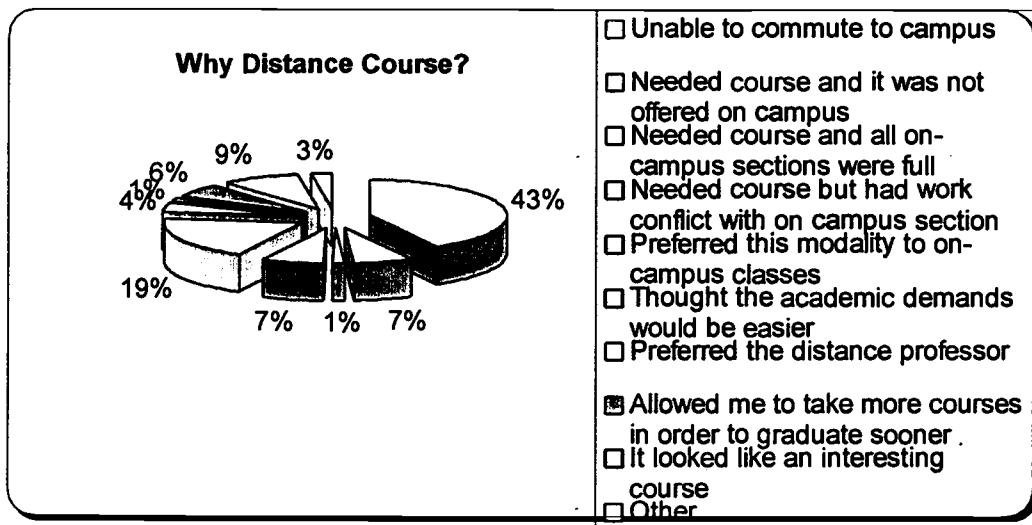


Fig.-III

Fig.-IV is representative of the level of satisfaction, as expressed by the sample student population studied. 39% reported that the services offered were good, while 29% reported that it was very good.

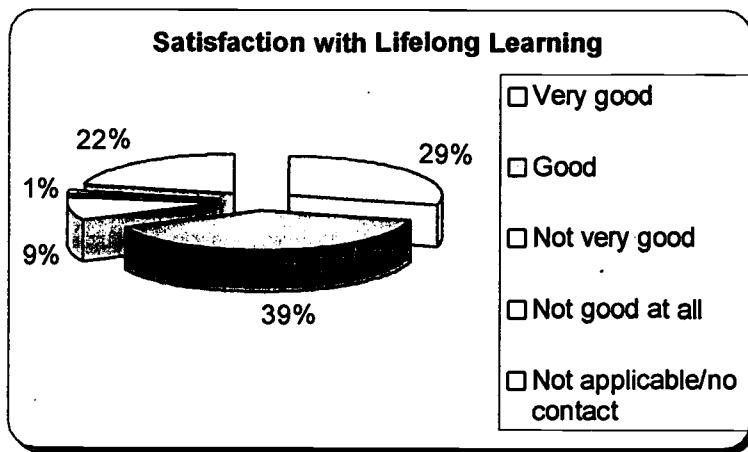


Fig-IV

Figs.-V and VI are some of the other measures of the level of satisfaction for the services offered by the Division of Lifelong Learning. These include interaction with the coordinator, as well as the experience of getting a proctor for the remote site. A significantly high percentage reported not applicable.

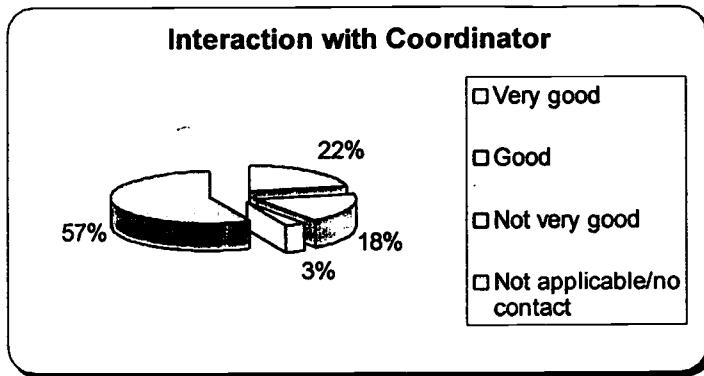


Fig-VI

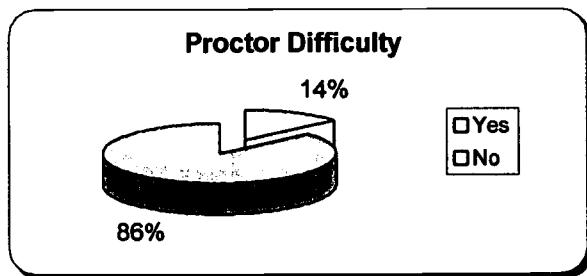


Fig-VII

In addition to the general level of satisfaction for Lifelong Learning, the questionnaire also took into account satisfaction with the different aspects of each of the medium of delivery. Fig.-VII is indicative of the general level of satisfaction with IHETS courses. Though 67% percent of the students reported that it was not applicable, 15% were in the average and above average range. The 67% of the students citing that IHETS was not applicable to them, would be a result of the fewer number of IHETS courses currently being offered at Indiana State University, as compared to the Internet courses.

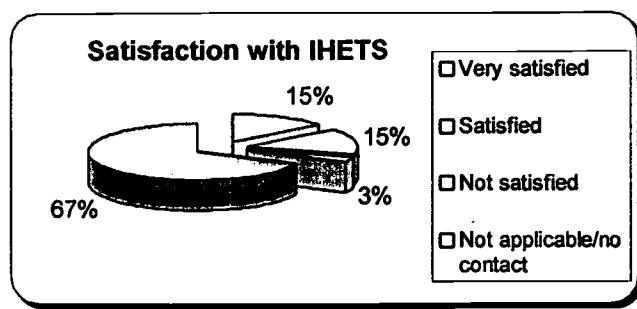


Fig-VII

Similarly, Fig.-VIII deals with the level of satisfaction experienced for videotape courses. It may be noteworthy that overall most students had no difficulty getting the tapes on time.

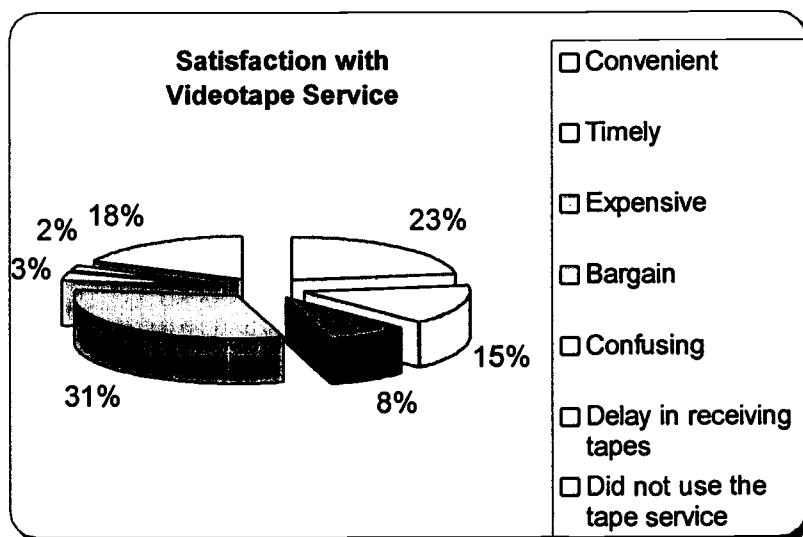


Fig-VIII

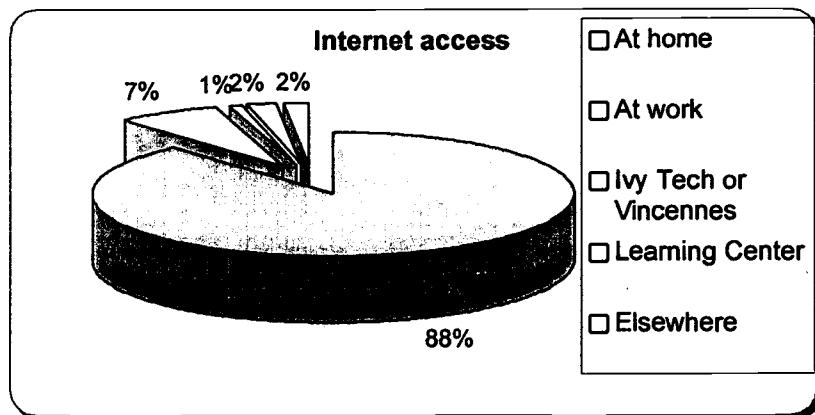


Fig-IX

Fig-IX illustrates the computer accessibility, with 88% students indicating that they have a computer at home and 7% indicating that they had computer access at work.

BEST COPY AVAILABLE

### Discussions, Conclusions and Recommendations

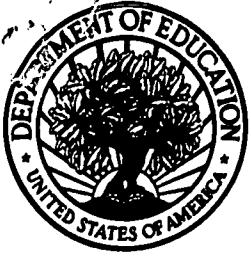
For the purpose of this study, the preference for the delivery medium and the level of satisfaction for the services of the Division of Lifelong Learning, at Indiana State University, were studied. It was found, that based on the initial hypothesis, a vast majority (77%) of the students preferred Internet courses to televised, videotape and correspondence courses. In addition, students reported an overall level of satisfaction (39%) for the services offered for distance education, at Indiana State University.

The results of the study supported the general findings, that given the role of computers and the Internet in our lives, it is currently the most popular mode of instruction. One of the reasons of the sample preference for Internet courses may be because 88% reported that they had a computer at home. In addition, 65% of the students were already taking Internet courses at the time of the survey. Another reason for the significantly large number of students supporting Internet courses may be because of the general nature of the questions in the survey. None of the questions on the survey, distinguished between the types of Internet courses offered at Indiana State. In addition, given the fact that Indiana State University also caters to the rural community in Indiana, distance is a primary reason for taking the distance education course. This is unlike many big universities, where a preference to this type of modality, is often the reason for taking the course.

The present study also concluded, that students of distance education were satisfied by the services offered by the Division of Lifelong Learning. The

study looked at the different aspects of distance education, including library resources, advisement, course registration, and financial aid. Students reported a general level of satisfaction for each.

One of the drawbacks of a research such as this, might be that since students are asked personal details such as the name, instructor's name, course details, etc., they may not be completely genuine in their replies. However, in order to overcome this problem, the Division of Lifelong Learning created an online version of the same form, for Spring 2002. This is meant to ensure student's privacy and security, while at the same time encouraging sincerity in filling out the answers.



**U.S. Department of Education**  
Office of Educational Research and Improvement (OERI)  
National Library of Education (NLE)  
Educational Resources Information Center (ERIC)



## **REPRODUCTION RELEASE**

(Specific Document)

### **I. DOCUMENT IDENTIFICATION:**

Title: The Role of Delivery Medium in Distance Education

Author(s): Piyusha Tandon and David A. Gilman

Corporate Source: Indiana State University

Publication Date: 14th April 2003

### **II. REPRODUCTION RELEASE:**

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND  
DISSEMINATE THIS MATERIAL HAS  
BEEN GRANTED BY

*Sample*

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)

1

Level 1

Check here for Level 1 release, permitting reproduction  
and dissemination in microfiche or other ERIC archival  
media (e.g., electronic) and paper copy.

The sample sticker shown below will be  
affixed to all Level 2A documents

PERMISSION TO REPRODUCE AND  
DISSEMINATE THIS MATERIAL IN  
MICROFICHE, AND IN ELECTRONIC MEDIA  
FOR ERIC COLLECTION SUBSCRIBERS ONLY,  
HAS BEEN GRANTED BY

*Sample*

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)

2A

Level 2A

Check here for Level 2A release, permitting reproduction  
and dissemination in microfiche and in electronic media for  
ERIC archival collection subscribers only

The sample sticker shown below will be  
affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND  
DISSEMINATE THIS MATERIAL IN  
MICROFICHE ONLY HAS BEEN GRANTED BY

*Sample*

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)

2B

Level 2B

Check here for Level 2B release, permitting reproduction  
and dissemination in microfiche only

Documents will be processed as indicated provided reproduction quality permits.  
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Sign  
here, →  
please

Signature: *David A. Gilman*

Printed Name/Position/Title  
David Alan Gilman, Ph. D., Professor of Education

Organization/Address:  
David Alan Gilman, Ph. D.  
Professor of Education  
Indiana State University  
101S School of Education  
Indiana State University

Phone:  
812-237-2925

FAX:  
812-237-4348

E-Mail Address:  
edavid@efac.indstate.edu

Date:  
*April 14, 2003*

### **III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):**

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:

Address:

Price:

### **IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:**

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:

Address:

### **V. WHERE TO SEND THIS FORM:**

Send this form to the following ERIC Clearinghouse:

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

**ERIC Processing and Reference Facility**  
4483-A Forbes Boulevard  
Lanham, Maryland 20706

Telephone: 301-552-4200

Toll Free: 800-799-3742

FAX: 301-552-4700

Email: [info@erictac.piccard.csc.com](mailto:info@erictac.piccard.csc.com)  
WWW: <http://www.erictacility.org>